UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/917,198	07/27/2001	Lakshminarayanan Gunaseelan	A-69523/RMA	8315

7590 05/02/2005

FLEHR HOHBACH TEST ALBRITTON & HERBERT LLP
Suite 3400
Four Embarcadero Center
San Francisco, CA 94111-4187

EXAMINER	
JACOBS, LASHONDA T	

ART UNIT	PAPER NUMBER
2157	

DATE MAILED: 05/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/917,198	GUNASEELAN ET AL.	
	Examiner	Art Unit	
	LaShonda T. Jacobs	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 February 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21 and 25-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21 and 25-39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Amendment

This Office Action is in response to Applicants' election to the restriction requirement. Applicants have elected Group I claims 1-11, 12, 13-21, 24-25 and 26. Applicants have amended claims 27-39 in order to place them in Group I. Claims 1-39 are presented for examination.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims **1-21** and **24-26** are rejected under 35 U.S.C. 102(b) as being anticipated by Krause et al (hereinafter, "Krause", U.S. Pat. No. 5,877,812).

As per claims **1** and **13**, Krause discloses a delivery system for use in a client server computer architecture in which the server provides streaming media assets to at least one client over a computer network, wherein the media assets can have a plurality of data formats, comprising:

- a packet producer that acquires at least one streaming media asset in packetized form and places time stamps on the packets, each time stamp specifying a delivery time for its respective packet, wherein the packet producer adjusts the delivery time of at least one time stamp in accordance with a value indicating a pre read size capability of a receiving client (col. 7, lines 1-11 and col. 10, lines 54-64);

- a time stamp packet queue containing the packets with time stamps in a first in, first out order (col. 10, lines 20-37); and
- a feeder module that removes packets from the time stamp packet queue and transmits the removed packets to a client via the computer network, the transmission for each packet concluded at least by the specified delivery time in each packet (col. 10, lines 38-55).

As per claim **12**, discloses a delivery system for use in a client server computer architecture in which the server provides streaming media assets to at least one client over a computer network, wherein the media assets can have a plurality of data formats, comprising:

- a packet producer that acquires at least one streaming media asset in packetized form and places time stamps on the packets, each time stamp specifying a delivery time for its respective packet, wherein the packet producer adjusts the delivery time of at least one time stamp in accordance with a value indicating a pre read size capability of a receiving client (col. 7, lines 1-11 and col. 10, lines 54-64);
- a time stamp packet queue containing the packets with time stamps in a first in, first out order (col. 10, lines 20-37); and
- a feeder module that removes packets from the time stamp packet queue and transmits the removed packets to a client via the computer network, the transmission for each packet concluded at least by the specified delivery time in each packet, the feeder module comprising a stream reader and a stream processor, the stream processor configured to process data in accordance with a predetermined data format, the stream reader obtaining a streaming media asset in the form of a packetized stream of data and

passes it to the stream processor, the stream processor placing delivery time stamps on the received data packets, wherein at least one of the time stamps is adjusted for an early in accordance with the receiving client's pre-read size capability (col. 10, lines 38-64).

As per claim **26**, discloses a delivery system for use in a client server computer architecture in which the server provides streaming media assets to at least one client over a computer network, wherein the media assets can have a plurality of data formats, comprising:

- a packet producer that acquires at least one streaming media asset in packetized form and places time stamps on the packets, each time stamp specifying a delivery time for its respective packet, wherein the packet producer adjusts the delivery time of at least one time stamp in accordance with a value indicating a pre read size capability of a receiving client (col. 7, lines 1-11 and col. 10, lines 54-64);
- a time stamp packet queue containing the packets with time stamps in a first in, first out order (col. 10, lines 20-37); and
- a feeder module that removes packets from the time stamp packet queue and transmits the removed packets to a client via the computer network, the transmission for each packet concluded at least by the specified delivery time in each packet, the feeder module comprising a stream reader and a stream processor, the stream processor configured to process data in accordance with a predetermined data format, the stream reader obtaining a streaming media asset in the form of a packetized stream of data and passes it to the stream processor, the stream processor placing delivery time stamps on the received data packets, wherein at least one of the time stamps is adjusted for a

delayed delivery in accordance with the receiving client's max buffer size capability (col. 10, lines 38-64).

As per claims **2** and **14,** Krause discloses wherein the packet producer further comprises:

- a stream reader (col. 6, lines 45-49); and
- a stream processor (col. 6, lines 45-49).

As per claims **3** and **15**, Krause further discloses:

- a plurality of packet producers, each packet producer of said plurality supporting a different data format (col. 6, lines 21-29).

As per claims **4** and **16**, Krause discloses:

- wherein the stream reader obtains a streaming media asset in the form of a packetized stream of data and passes it to the stream processor (col. 6, lines 21-29).

As per claims **5** and **17**, Krause discloses:

- wherein the stream processor is configured to process data in accordance with a predetermined format and places delivery time stamps on data packets received from the stream reader (col. 10, lines 54-64).

As per claims **6** and **18**, Krause discloses:

- wherein the stream reader and stream processor share a common thread of control (col. 10, lines 54-64).

As per claims **7** and **19**, Krause discloses wherein the streaming media asset comprises:

- packets having uniform size and delivery times at irregular intervals (col. 10, lines 54-64).

As per claims **8** and **20**, Krause discloses:

- wherein the streaming media asset comprises packets having variable size and delivery times at irregular intervals (col. 10, lines 54-64).

As per claims **9** and **21**, Krause discloses wherein the streaming media asset comprises:

- packets having uniform size and delivery times of regular intervals (col. 6, lines 49-58).

As per claims **10** and **24**, Krause further discloses:

- multiple feeder modules (col. 10, lines 38-64).

As per claims **11** and **25**, Krause further discloses:

- multiple time stamped packet queues (col. 10, lines 20-37).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims **27-39** are rejected under 35 U.S.C. 103(a) as being unpatentable over Krause in view of Meggers et al (hereinafter, "Meggers", U.S. Pat. No. 6,728,270).

As per claims **27** and **28**, Krause discloses the invention substantially as claims discussed abover.

However, Krause does not explicitly disclose wherein the feeder module further operative to control the admission of streaming media assets into the feeder that are to be delivered to a client, the control of admission comprising:

- defining a time window in terms of a first duration of time;
- computing a number of bytes that need to be delivered during the time window, the bytes comprising a first streaming media asset;
- translating the computed number of bytes into a first time to process value for the first streaming media asset; and
- admitting for delivery the first streaming media asset if the first time to process value is smaller than the time window.

Meggers discloses a scheduling and admission control of packet data traffic including:

- defining a time window in terms of a first duration of time (col. 6, lines 37-46);
- computing a number of bytes that need to be delivered during the time window, the bytes comprising a first streaming media asset (col. 6, lines 66-67 and col. 7, lines 1-7);
- translating the computed number of bytes into a first time to process value for the first streaming media asset (col. 7, lines 12-23); and
- admitting for delivery the first streaming media asset if the first time to process value is smaller than the time window (col. 7, lines 12-23).

Given the teaching of Meggers, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krause by performing an admission control before delivery deadlines in order to admit packets for real time processing in a timely and efficient manner.

As per claim **29**, Krause discloses in a delivery system for use in a client server computer architecture in which the server provides streaming media assets that can have a plurality of data

formats to at least one client over a computer network, a method for delivering the streaming media assets comprising:

- acquiring at least one streaming media asset in packetized form, placing time stamps on the packets specifying a delivery time for its respective packet, and adjusting the delivery time of at least one time stamp in accordance with a value indicating a pre read size capability of a receiving client (col. 7, lines 1-11 and col. 10, lines 54-64);
- maintaining a time stamp packet queue containing the packets with time stamps in a first in first out order (col. 10, lines 20-37); and
- removing packets from the time stamp packet queue and transmitting the removed packets to a client via the computer network, the transmission for each packet concluded at least by the specified delivery time in each packet (col. 10, lines 38-64).

However, Krause does not explicitly disclose:

- resolving delivery conflicts between at least two streaming media assets delivered simultaneously by the server to at least one client, wherein the at least one client has a pre read size value that indicates a capability of the client to pre read data, the streaming media assets comprising data packets having delivery time stamps, the resolving of delivery conflicts comprising:
- detecting a delivery conflict between the at least two streaming media assets;
- adjusting at least one of the time stamps to indicate an early delivery for at least one of the packets, wherein the adjusted time stamp is adjusted in accordance with the pre read size value; and
- delivering the packets at least by times specified by the time stamps.

Meggers discloses a scheduling and admission control of packet data traffic including:

- resolving delivery conflicts between at least two streaming media assets delivered simultaneously by the server to at least one client, wherein the at least one client has a pre read size value that indicates a capability of the client to pre read data, the streaming media assets comprising data packets having delivery time stamps (col. 12, lines 21-35), the resolving of delivery conflicts comprising:
- detecting a delivery conflict between the at least two streaming media assets (col. 11, lines 57-66);
- adjusting at least one of the time stamps to indicate an early delivery for at least one of the packets, wherein the adjusted time stamp is adjusted in accordance with the pre read size value (col. 12, lines 8-20); and
- delivering the packets at least by times specified by the time stamps (col. 12, lines 8-20).

Given the teaching of Meggers, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krause by performing an admission control before delivery deadlines in order to admit packets for real time processing in a timely and efficient manner.

As per claim **30**, Krause further discloses:

- the step of the client communicating the pre read size value to the server when the client requests delivery of a streaming media asset (col. 6, lines 45-57).

As per claim **31**, Krause further discloses the steps of:

- the server communicating to the client an optimum value for the pre read size value (col. 6, lines 45-57); and

- the client allocating sufficient resources to accommodate the optimum value for the pre read size value (col. 7, lines 1-11).

As per claims **32** and **37**, Krause discloses in a delivery system for use in a client server computer architecture in which the server provides streaming media assets that can have a plurality of data formats to at least one client over a computer network, a method for delivering the streaming media assets comprising:

- acquiring at least one streaming media asset in packetized form, placing time stamps on the packets specifying a delivery time for its respective packet, and adjusting the delivery time of at least one time stamp in accordance with a value indicating a pre read size capability of a receiving client (col. 7, lines 1-11 and col. 10, lines 54-64);
- maintaining a time stamp packet queue containing the packets with time stamps in a first in first out order (col. 10, lines 20-37);
- removing packets from the time stamp packet queue and transmitting the removed packets to a client via the computer network, the transmission for each packet concluded at least by the specified delivery time in each packet (col. 10, lines 38-64);

However, Krause does not explicitly disclose:

- resolving delivery conflicts between at least two streaming media assets delivered simultaneously by the server to at least one client, wherein the at least one client has a max buffer size value that indicates a capability of the client to accept delayed data, the streaming media assets comprising data packets having delivery time stamps, the resolving of delivery conflicts comprising:
- detecting a delivery conflict between the at least two streaming media assets;

- adjusting at least one of the time stamps to indicate an early delivery for at least one of the packets, wherein the adjusted time stamp is adjusted in accordance with max buffer size value; and
- delivering the packets at least by times specified by the time stamps.

Meggers discloses a scheduling and admission control of packet data traffic including:

- resolving delivery conflicts between at least two streaming media assets delivered simultaneously by the server to at least one client, wherein the at least one client has a pre read size value that indicates a capability of the client to pre read data, the streaming media assets comprising data packets having delivery time stamps (col. 12, lines 21-35), the resolving of delivery conflicts comprising:
- detecting a delivery conflict between the at least two streaming media assets (col. 11, lines 57-66);
- adjusting at least one of the time stamps to indicate an early delivery for at least one of the packets, wherein the adjusted time stamp is adjusted in accordance with the pre read size value (col. 12, lines 8-20); and
- delivering the packets at least by times specified by the time stamps (col. 12, lines 8-20).

Given the teaching of Meggers, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krause by performing an admission control before delivery deadlines in order to admit packets for real time processing in a timely and efficient manner.

As per claim **33**, Krause further discloses:

- the step of the client communicating the max buffer size value to the server when the client requests delivery of a streaming media asset (col. 6, lines 45-57).

As per claim **34**, Krause further discloses:

- the steps of the server communicating to the client an optimum value for the max buffer size value (col. 6, lines 45-57); and
- the client allocating sufficient resources to accommodate the max buffer size value having the optimum value (col. 7, lines 1-11).

As per claim **35**, Krause discloses in a delivery system for use in a client server computer architecture in which the server provides streaming media assets that can have a plurality of data formats to at least one client over a computer network, a method for delivering the streaming media assets comprising:

- acquiring at least one streaming media asset in packetized form, placing time stamps on the packets specifying a delivery time for its respective packet, and adjusting the delivery time of at least one time stamp in accordance with a value indicating a pre read size capability of a receiving client (col. 7, lines 1-11 and col. 10, lines 54-64);
- maintaining a time stamp packet queue containing the packets with time stamps in a first in first out order (col. 10, lines 20-37);
- removing packets from the time stamp packet queue and transmitting the removed packets to a client via the computer network, the transmission for each packet concluded at least by the specified delivery time in each packet (col. 10, lines 38-64).

However, Krause does not explicitly disclose:

- controlling the admission of streaming media assets into the time stamp packet queue that are to be delivered to a client, the control of admission comprising:
- defining a time window in terms of a first duration of time;
- computing a number of bytes that need to be delivered during the time window, the bytes comprising a first streaming media asset;
- translating the computed number of bytes into a first time to process value for the first streaming media asset;
- adding the first time to process value to a cumulative time to process value; and
- admitting for delivery the first streaming media asset if the cumulative time to process value is smaller than the time window.

Meggers discloses a scheduling and admission control of packet data traffic including:

- controlling the admission of streaming media assets into the time stamp packet queue that are to be delivered to a client (abstract and col. 11, lines 46-56), the control of admission comprising:
- defining a time window in terms of a first duration of time (col. 6, lines 37-46);
- computing a number of bytes that need to be delivered during the time window, the bytes comprising a first streaming media asset (col. 6, lines 66-67 and col. 7, lines 1-7);
- translating the computed number of bytes into a first time to process value for the first streaming media asset (col. 7, lines 12-23);
- adding the first time to process value to a cumulative time to process value (col. 7, lines 12-23); and

- admitting for delivery the first streaming media asset if the cumulative time to process value is smaller than the time window (col. 7, lines 12-23).

Given the teaching of Meggers, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krause by performing an admission control before delivery deadlines in order to admit packets for real time processing in a timely and efficient manner.

As per claim **36**, Krause discloses in a delivery system for use in a client server computer architecture in which the server provides streaming media assets that can have a plurality of data formats to at least one client over a computer network, a method for delivering the streaming media assets comprising:

- acquiring at least one streaming media asset in packetized form, placing time stamps on the packets specifying a delivery time for its respective packet, and adjusting the delivery time of at least one time stamp in accordance with a value indicating a pre read size capability of a receiving client (col. 7, lines 1-11 and col. 10, lines 54-64);
- maintaining a time stamp packet queue containing the packets with time stamps in a first in first out order (col. 10, lines 20-37);
- removing packets from the time stamp packet queue and transmitting the removed packets to a client via the computer network, the transmission for each packet concluded at least by the specified delivery time in each packet (col. 10, lines 38-64).

However, Krause does not explicitly disclose:

- controlling the admission of streaming media assets into the time stamp packet queue that are to be delivered to a client, the control of admission comprising:

- defining a time window in terms of a first duration of time;
- computing a number of bytes that need to be delivered during the time window, the bytes comprising a first streaming media asset;
- translating the computed number of bytes into a first time to process value for the first streaming media asset;
- adding the first time to process value to a cumulative time to process value;
- admitting for delivery the first streaming media asset if the cumulative time to process value is smaller than the time window; and
- resolving delivery conflicts between at least two streaming media assets delivered simultaneously by the server to at least one client, wherein the at least one client has a pre read size value that indicates a capability of the client to pre read data, the streaming media assets comprising data packets having delivery time stamps, the resolving of delivery conflicts comprising:
- detecting a delivery conflict between the at least two streaming media assets;
- adjusting at least one of the time stamps to indicate an early delivery for at least one of the packets, wherein the adjusted time stamp is adjusted in accordance with the pre read size value; and
- delivering the packets at least by times specified by the time stamps.

Meggers discloses a scheduling and admission control of packet data traffic including:

- controlling the admission of streaming media assets into the time stamp packet queue that are to be delivered to a client (abstract and col. 11, lines 46-56), the control of admission comprising:

- defining a time window in terms of a first duration of time (col. 6, lines 37-46);
- computing a number of bytes that need to be delivered during the time window, the bytes comprising a first streaming media asset (col. 6, lines 66-67 and col. 7, lines 1-7)
- translating the computed number of bytes into a first time to process value for the first streaming media asset (col. 7, lines 12-23);
- adding the first time to process value to a cumulative time to process value (col. 7, lines 12-23);
- admitting for delivery the first streaming media asset if the cumulative time to process value is smaller than the time window (col. 7, lines 12-23); and
- resolving delivery conflicts between at least two streaming media assets delivered simultaneously by the server to at least one client, wherein the at least one client has a pre read size value that indicates a capability of the client to pre read data, the streaming media assets comprising data packets having delivery time stamps (col. 12, lines 21-35), the resolving of delivery conflicts comprising:
- detecting a delivery conflict between the at least two streaming media assets (col. 11, lines 57-66);
- adjusting at least one of the time stamps to indicate an early delivery for at least one of the packets, wherein the adjusted time stamp is adjusted in accordance with the pre read size value (col. 12, lines 8-20); and
- delivering the packets at least by times specified by the time stamps (col. 12, lines 8-20).

Given the teaching of Meggers, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krause by performing an admission control before

delivery deadlines in order to admit packets for real time processing in a timely and efficient manner.

As per claims **38** and **39**, Krause discloses in a delivery system for use in a client server computer architecture in which the server provides streaming media assets that can have a plurality of data formats to at least one client over a computer network, a method for delivering the streaming media assets comprising:

- acquiring at least one streaming media asset in packetized form, placing time stamps on the packets specifying a delivery time for its respective packet, and adjusting the delivery time of at least one time stamp in accordance with a value indicating a pre read size capability of a receiving client (col. 7, lines 1-11 and col. 10, lines 54-64);
- maintaining a time stamp packet queue containing the packets with time stamps in a first in first out order (col. 10, lines 20-37);
- removing packets from the time stamp packet queue and transmitting the removed packets to a client via the computer network, the transmission for each packet concluded at least by the specified delivery time in each packet (col. 10, lines 38-64).

However, Krause does not explicitly disclose:

- controlling the admission of streaming media assets into the time stamp packet queue that are to be delivered to a client, the control of admission comprising:
- providing a space window comprising a value representing an amount of contiguously stored data;
- scanning with the space window a file containing a media asset to be transmitted from the server computer system to the client computer system; and

- returning a value representing the shortest duration of time over which the data contained in the space window can be delivered.

Meggers discloses a scheduling and admission control of packet data traffic including:

- controlling the admission of streaming media assets into the time stamp packet queue that are to be delivered to a client (abstract and col. 11, lines 46-56), the control of admission comprising:
- providing a space window comprising a value representing an amount of contiguously stored data (col. 6, lines 37-46);
- scanning with the space window a file containing a media asset to be transmitted from the server computer system to the client computer system (col. 6, lines 66-67 and col. 7, lines 1-7);
- returning a value representing the shortest duration of time over which the data contained in the space window can be delivered (col. 7, lines 12-23).

Given the teaching of Meggers, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Krause by performing an admission control before delivery deadlines in order to admit packets for real time processing in a timely and efficient manner.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 6,771,644 to Brassil et al

U.S. Pat. No. 6,137,834 to Wine et al

U.S. Pat. No. 6,567,409 to Tozaki et al

U.S. Pat. No. 5,640,388 to Woodhead et al

U.S. Pat. No. 5,801,781 to Hiroshima et al

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaShonda T. Jacobs whose telephone number is 571-272-4004. The examiner can normally be reached on 8:30 A.M.-5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LaShonda T Jacobs
Examiner
Art Unit 2157

ltj
April 27, 2005

SALEH NAJJAR
PRIMARY EXAMINER